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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,982	09/19/2003	Tzvi Avnery	2251.2002-009	8622
21005	7590	09/09/2009	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			MAYEKAR, KISHOR	
			ART UNIT	PAPER NUMBER
			1795	
			MAIL DATE	DELIVERY MODE
			09/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/666,982	AVNERY, TZVI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kishor Mayekar	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 May 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5,24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5,24 and 25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment of 11 May 2009 has been entered. Claims 1, 3 and 4 have been amended. Claims 1-5, 24 and 25 are pending in this application with claims 1, 3 and 4 being independent claims.
2. Applicant's arguments with respect to claims 1-5, 24 and 25 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being obvious over Reuter et al. (GB 2,173,779 A) as evidenced by Reuter et al. (GB 2,166,284 A) and in view of Helfritch et al. (US 5,695,616). Reuter '779's invention, a reference cited by Applicant, is directed to an apparatus and a method thereof for the desulphurization and denitrating of exhaust gases by an electron beam irradiation. With respect to independent claims 1, 3 and 4, Reuter '779 discloses in Fig. 5 a comparison device comprising a rectangular duct, and first

and second electron beam emitters, where the device is described in German Patent Application P34 39 190.8 (page 1, lines 25-36). Reuter '779 also discloses that ammonia is added to the exhaust gases before the irradiation (page 1, lines 40-44). Reuter in GB '284 based on the German Patent application discloses the recited window (page 2, lines 30-33). The difference between Reuter '779 and claims 1, 3 and 4 is the detailing of the recited duct. Helfritch, a reference cited in the last Office action, teaches in a device for treating exhaust gases by irradiation with electron beam the limitation (Fig. 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Reuter's teachings as shown by Helfritch because provision of the port into the duct would result in adding the ammonia to the exhaust gas.

As to the subject matter of claim 5, since it is not a structure, it cannot be given any patentable weight. Further, it appears that Reuter '779's exhaust gas would also contain volatile organic compounds, in absence of evidence to the contrary.

5. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuter '779 as evidenced by Reuter '284 and as modified by Helfritch '616 as applied to claims 1-5 above, and further in view of Namba et al. (US 5,244,552) and Hirai (US 5,015,442), both references also cited in the last Office action. The difference between the references as applied above and the instant claims is the provision of the recited

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reactive bed. Namba teaches in an apparatus for gas treatment by electron beam irradiation that that ozone is formed during the treatment (col. 3, lines 49-52). Hirai teaches in a device for treating air the provision of particulate catalyst to remove ozone therefrom (Fig. 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Namba and Hirai because this would result in removing ozone generated during the treatment. Further, it has been held that the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

*Response to Arguments*

6. Applicant's arguments filed 11 May 2009 have been fully considered but they are not persuasive because of a new ground of rejection as set forth in the paragraph above with the addressing to arguments.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kishor Mayekar/  
Primary Examiner  
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9.